## SFUND RECORDS CTR 88090091

OFFICE MEMORANDUM

SFUND RECORDS CTR 1633-00017

TO:

Robert G. Wright

William B. Baldwin

FROM:

Lawrence W. Batty (w)

SUBJECT:

New Idria Mine, San Benito County

On Friday, 29 October 1976, I visited the New Idria Mine in San Benito County. I met Greg Fisher with the EPA in San Francisco at the site. The EPA received a letter dated 31 August 1976 from Mr. William G. White, owner of the ranch approximately one half mile downstream from the mine, complaining that the mine was polluting San Carlos Creek.

Prior to meeting with Greg Fisher at the mine, I stopped to talk with a Mr. John Warner, ranch foreman for William White. Mr. Warner said that Mr. White wants some kind of control device installed on the dam, so water can be released once or twice per year, instead of continuously. He said that it would be better if mine drainage could be completely blocked off, but he did not view this as a technically feasible solution. There are some 35 miles of mines in the hills behind New Idria and if the main mine portal at New Idria was blocked off, the hydraulic head would probably cause a blow out somewhere higher up on the mountain.

The sediment dam noted in Mr. White's letter to the EPA and in our inspection report of 20 August 1975 was still intact and discharging mine wastewater through a pipe to a drainage channel. The drainage channel merges with the San Carlos Creek a short distance downstream. All of the water captured by the sediment dam appeared to be coming from the mine portal. The small stream just to the north of the main mine portal was dry. Mine runoff was causing visible discoloration in San Carlos Creek.

On this visit I noticed a waste stream coming from the mine area which was not noted in our previous inspection reports. Greg and I noticed a small stream of very black material which appeared to be tar or asphalt coming from one of the mine buildings. This waste stream dried up before it could merge with the discharge from the sediment dam. However, there was dried tarlike material on the ground immediately adjacent to the drainage channel which carries runoff from the sediment dam.

Greg collected a number of samples and said that the EPA would have a report on the analyses of their samples in about a month. He conducted on-site analyses for flow rate and pH. The waste stream from the mine was responsible for approximately 60% of the total volume of flow in San Carlos Creek. The pH of the mine drainage was about 2.5.

There were several workers at the mine. None of these people would give me their names or answer any questions about what was going on at the mine. In answer to a question about what the new owners intended to do at the mine, one individual remarked "You don't expect us to tell you, do you?"



It is my conclusion that the owners of the New Idria Mine are in violation of Board Resolution No. 70-205 which states in part:

"The waste discharge shall not cause a pollution of ground or surface waters."

The new owners of the mine have not responded to our letter of 2 September 1976 requesting information regarding their plans for the future use of this property and their plans to abate the pollution of San Carlos Creek.

LWB/ic 11/02/76

00001745

TO:

Lawrence W. Batty

Darrell J. Smith 9

Louis A. Beck

FROM:

Edward S. Armstrong

SUBJECT:

New Idria Mine, San Benito County -- Complaint Investigation

On 1 April 1975, Larry Batty and I inspected the New Idria Mine site and surrounding territory in response to a complaint. The owner of the ranch approximately 1½ miles downstream from the mine site claimed runoff from the mine was degrading the creek to the point that he was afraid to let his cattle drink the water.

It was immediately apparent that runoff from the mine area was affecting San Carlos Creek. There was an easily visible color change and chemical reaction occurring at the point the runoff entered the creek. The drainage water on the mine site was obviously highly mineralized and had deposited deep beds of precipitates even before entering San Carlos Creek. Most of the runoff is seepage coming out the main mine portal but some natural drainage courses trickle through mine tailings before combining with the seepage from the portal.

At the time of inspection, the water draining from the mine area made up approximately one quarter of the total volume of water flowing in San Carlos Creek below mine property. It is anticipated that the proportion of the flow from the mine to the creek will increase during the drier months of the year.

We had not anticipated the extent of the problem and did not have enough containers to collect samples from enough separate sites to make an evaluation. I returned to the mine area on 8 April 1975 and collected samples from six sites as described below and shown on the accompanying map:

Sample Site #1: A small stream just to the north of main mine

portal. Photo No. 1.

Sample Site #2: Stream of water flowing from main mine portal.

Photo No. 2.

Sample Site #3: San Carlos Creek just upstream from confluence with

runoff from mine area. Photo No. 3.

Sample Site #4: Runoff from mine area just prior to entering

San Carlos Creek. This is a combination of water

from sites 1 and 2. Photo No. 3.



Sample Site #5: San Carlos Creek at fork on "White" Ranch, approximately 1-3/4 miles downstream from point of entrance of mine runoff. Photo No. 4.

Sample Site #6: East Fork San Carlos Creek just upstream from confluence with San Carlos Creek. Photo No. 5.

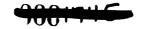
Two grab samples were taken at each site. One sample from each site was fixed with nitric acid while the other samples were left raw. The fixed samples were further split and potassium permanganate added to the smaller portions. The samples were sent to the Department of Water Resources Laboratory in Bryte for analysis. The following is the result of the analyses.

Constituent	Site #1	Site #2	Site #3	Site #4	Site #5	Site #6
Hardness mg/l Calcium mg/l Magnesium mg/l pH Sulfate mg/l	3160 397 527 4.5 34 <b>2</b> 0	3200 296 598 2•7 7990	724 5.4 172 8.5 186	2900 283 533 2.8 6400	1350 120 255 7•7 1350	588 24 128 8.4 263
Specific Conductance umhos Arsenic mg/l	43 <b>2</b> 0 0.0	8560 0.05	1170	7380 0.02	2400 0.02	1250 0.0
Cadmium mg/l Chromium mg/l Copper mg/l	0.01 0.02 0.28	0.0 0.0 0.58	0.0 0.08 0.02	0.0 0.01 0.45	0.0 0.17 0.11	0.0 0.0
Iron mg/l Lead mg/l Mercury mg/l Aluminum mg/l	0.64 0.01 0.0002 45.0	12.0 0.01 0.0023 226.0	7.4 0.01 0.0027 4.3	9.7 0.01 0.0040 248.0	9.6 0.02 0.0078 74.0	0.12 0.01 0.0000 0.4

The quality of the natural runoff waters (Sites 3 and 6) is acceptable for livestock use. The quality of water from the mine (Sites 1, 2 and 4) and San Carlos Creek at the White Ranch (Site 5) is not within levels recommended for livestock use by the EPA in the publication entitled, "Water Quality Criteria 1972".

The quality of natural water is marginal for irrigation use and unsatisfactory for domestic use. Mine runoff water is unacceptable for either use.

Mr. White possesses a license for diversion and use of water (Permit #4381) to divert 0.2 C.F.S. from San Carlos Creek for irrigation and domestic purposes.



## Conclusions:

- 1. The New Idria Mining and Chemical Company is in violation of Resolution No. 70-205 which states:
  - "The waste discharge shall not cause a pollution of ground or surface waters."
- 2. Mr. White's license to divert water from San Carlos Creek for a domestic use is precluded by the natural background quality of the waters. The irrigation and stockwatering use has been damaged by the mine runoff.

## Recommendations:

The New Idria Mining and Chemical Company should try to find a method to contain the runoff on mine property.

ESA/ic 06/02/75

